

-1- (JAP10)

TITLE

PATENT APPLICANT

INVENTORS

PATENT NUMBER

APPLICATION DETAILS

SOURCE

INT'L PATENT CLASS

JAP10 CLASS

ABSTRACT

ALKALINE CELL

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SHINODA, KENICHI; OOTA, HIROHIKO; MAEDA, YOSHIHIRO;
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87.05.15 J62105365, JP-105365

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87.10.12 SECT. E, SECTION NO. 548; VOL. 11, NO. 312,
PG. 111.

H01M-004/06; H01M-004/42

42.9 (ELECTRONICS--Other)

PURPOSE: To suppress generation of hydrogen gas caused by formation of a local cell due to a potential difference between different types of metal sufficiently even in case of amalgamation lower than 3wt% by arranging a micro particle layer near the current collecting face of negative electrode.

CONSTITUTION: A negative electrode is formed of a micro particle layer composed of fine zinc powder and a rough particle layer composed of coarse zinc powder where the micro particle layer is arranged near the current collecting face of the negative electrode. The micro particle layer composed of fine zinc powder is arranged near the current collecting face of the negative electrode, thereby the contacting area of zinc powder against the current contacting face of the negative electrode is increased and the total quantity of mercury to be transferred to the current collecting face of the negative electrode is increased so that the current collecting face of the negative electrode is amalgamated uniformly and sufficiently even if the amalgamation is lower than 3wt% or 2wt%. While when employing a rough particle layer for the remaining section, the total surface area of zinc powder in the negative electrode is controlled so that it is possible to suppress the volume of gas to be produced through corrosive reaction of zinc powder to same level with conventional cell.

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